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APR 10 1001 TRANSMITTAL OF APPEAL BRIEF (Small Entity)						Docket No. HWE-107A/0247-5		
In Re Anone Con Of: Harry W. Eberle, III								
• •	lication No.	Filing Date	Examiner	Customer No.	'	t Confirmation No.		
10	0/037,325	January 3, 2002	Ernesto Garcia	000025901	3679	5841		
Invention: DECKING SYSTEM AND ANCHORING DEVICE								
COMMISSIONER FOR PATENTS: Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed on: May 25, 2005, further in response to the Notification of Non-Compliant Appeal Brief dated March 14, 2007								
×								
The fee for filing this Appeal Brief is: The Fre in the Amount of \$250 was paid on Sant 20, 2006								
	A check in the amount of the fee is enclosed.							
	The Director has already been authorized to charge fees in this application to a Deposit Account.							
X	The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 503832							
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Signature

Ernest D. Buff, Esq. Attorney For Applicant Reg. No.: 25,833

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Dated: April 5, 2007

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Signature of Person Mailing Correspondence

Ernest D. Buff

Typed or Printed Name of Person Mailing Correspondence

Attorney Docket No.: 0247-5



In re Application of:

Harry W. Eberle, III

Group Art Unit: 3679

Examiner:

Ernesto Garcia

Serial No.: Filed:

January 3, 2002

For:

DECKING SYSTEM AND ANCHORING DEVICE

Old Docket No.:

HWE-107A

10/037,325

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0247-5

April 5, 2007

Bedminster, NJ 07921

Board of Patent Appeals and Interferences United States Patent and Trademanrk Office Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

SUBSTITUTE APPEAL BRIEF

This Substitute Brief is submitted in response to the Notification of Non-Compliant Appeal Brief under 37 CFR 41.37 dated March 14, 2007, in which the Appeal Brief dated September 20, 2006 and entered on March 1, 2007 upon grant of appellant's Petition for Revival of an Unintentionally Abandoned Application submitted under 37 C.F.R. §1.137(b). This Substitute Appeal Brief is submitted in furtherance of the Notice of Appeal entered May 24, 2005 in the above-identified application.

In the aforementioned Notification, the previous Appeal Brief was deemed to be non-compliant with the requirements of 37 CFR 41.37. More specifically, it was

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indicated that: (i) at least one amendment had been filed subsequent to the final rejection and the brief did not contain a statement of the status of each such amendment, as required by 37 CFR 41.37(c)1)(iv); and (ii) the brief did not contain a concise explanation of the subject matter defined in each of the independent claims

involved in the appeal, with reference to the specification by page and line number and

to the drawings by reference characters.

The present Substitute Appeal Brief has been amended in: (i) Section IV – Status of Amendments, to refer to Applicant's amendment under 37 CFR 1.116 that was submitted on May 24, 2005, but not entered; and (ii) Section V – Summary of Claimed Subject Matter, to delineate the independent claims pending in the present appeal and provide specific reference to the teaching in the specification and drawings that support these claims, as well as the claims dependent thereon. For the convenience of the Board, Section XII has been added to provide a Drawings Appendix in which are reproduced the drawing sheets bearing amended Figs. 1-8 that were submitted with the unentered May 24, 2005 amendment. Section V also makes reference to the objection to the drawings that gave rise to the proposed drawing amendments.

Applicant respectfully submits that the any deficiencies of the previous Appeal Brief have been cured in the present Substitute Appeal Brief, which is thus submitted to be compliant with the requirements of 37 C.F.R. §41.37. Applicant is not aware of any other response that is now outstanding.

Applicant submits that no additional fees are due for the filing of the present Substitute Appeal Brief. However, should any additional fees be deemed

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necessary in connection with the present submission, authorization is given to charge Deposit Account No. 50-3832.

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(I) Real Party in Interest

The real party in interest is Harry W. Eberle, III, the inventor of the present invention.

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(II) Related Appeals and Interferences

There are no other appeals or interferences in related applications known to the appellant or to the appellant's legal representative, which will directly affect or be directly affected by, or have a bearing on, the Board's decision in the pending appeal.

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(III) Status of Claims

The claims on appeal are claims 29-38, which were finally rejected in the Office Action dated December 29, 2004. A copy of these claims is set forth in Section IX – Claims Appendix.

Originally-filed claims 1-9 and subsequently added claims 21-28 have been cancelled during prosecution.

Originally-filed claims 10-20 stand withdrawn as being directed to a different invention.

Claims 29, 31, and 32 stand finally rejected under 35 U.S.C. §102(b) as being anticipated by Great Britain Patent Publication GB 1,350,754.

Claims 33 and 35-38 stand finally rejected under 35 U.S.C. §102(e) as being anticipated by US Patent 6,363,677 to Chen et al.

Claim 29 stands finally rejected under 35 U.S.C. §103(a) as being unpatentable over by US Patent 5,704,181 to Fisher et al.

Claim 30 stands finally rejected under 35 U.S.C. §103(a) as being unpatentable over Fisher et al. in view of US Patent 6,442,908 to Naccarato et al.

Claim 33 stands finally rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent 556,998 to Major in view of Fisher et al.

Claim 34 stands finally rejected under 35 U.S.C. §103(a) as being unpatentable over Major in view of Fisher et al. and further in view of Naccarato et al.

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(IV) Status of Amendments

The claim listing set forth in Section IX reflects the pending claims, i.e. claims 29-38, which were presented by way of applicants' amendment under 37 CFR §1.111 that was submitted on October 14, 2004. Entry of these claims was confirmed by the Office Action dated December 29, 2004, wherein claims 29-38 were finally rejected.

Applicant's Amendment under 37 CFR 1.116, submitted on May 24, 2005, and including two amended drawing sheets bearing Figs. 1-8, was not entered, the required fee for a petition for an extension of time to respond to the rejection of December 27, 2004 having not been timely paid. A copy of these unentered drawing sheets is included for the convenience of the Board as Section XII – Drawings.

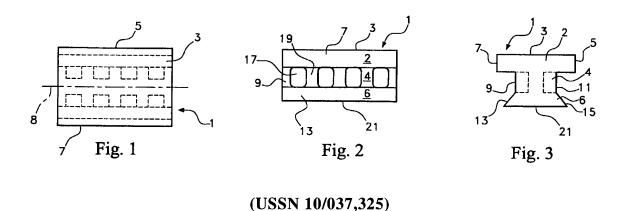
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(V) Summary of Claimed Subject Matter

Applicants' claim 29 (and claims 30-32 dependent thereon) are directed to an anchoring device adapted to secure two adjacent decking boards to a supporting member, while claim 33 (and claims 34-38 dependent thereon) relate to a decking system comprising decking boards secured to supporting members using an anchoring device, e.g. of the type delineated by claims 29-32.

A representative embodiment of the anchoring device delineated by independent claim 29 is depicted by Figs. 1-3 of the instant application, which respectively show top, front-side, and end views of anchoring device 1 of the invention. For convenience, these figures are reproduced below.



As set forth at page 27, lines 7-15, anchoring device 1 includes a top element 2 having a flat top surface 3 having a top view shape that is generally rectangular. Walls 5 and 7 are preferably, but not necessarily, parallel. The top element 2 has a first predetermined width, measured side to side at its maximum width (page 29, lines 10-12). A vertical support member 4 extends from the bottom surface of top element 2

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along an imaginary attachment line 8 preferably located along the center line of surface 3 (page 28, lines 5-7). Vertical support member 4 includes walls 9 and 11 and preferably recesses such as recess 17 creating support columns, such as column 19 (page 28, lines 10-13). Vertical support member 4 has a second predetermined width measured side to side at its respective maximum width (page 29, lines 12-14). Bottom element 6 has a substantially flat horizontal bottom surface 21 with tapered side walls 13 and 15 and a third predetermined width measured at its respective maximum width (page 28, lines 13-15; page 29, lines 14-16). The vertical dimensions of anchoring device 1 permit the device to be placed on a floor joist with the sides of top element 2 thereby being located at a height permitting them to engage receiving slots in the horizontal beams that form the deck surface (page 28, line 15 to page 29, line 5; page 23, line 15 to page 24, line 5). The thickness and width of top element 2 are selected to provide a suitable slip fit into the receiving slots of the horizontal beams (page 25, lines 6-10). [0030] The first predetermined width is greater than the third predetermined width which, in turn, is greater than the second predetermined width. The relationship among the widths provides maximum support for the adjacent deck boards while providing a spacing between the boards that is typical or conventional in deck construction. [0041]

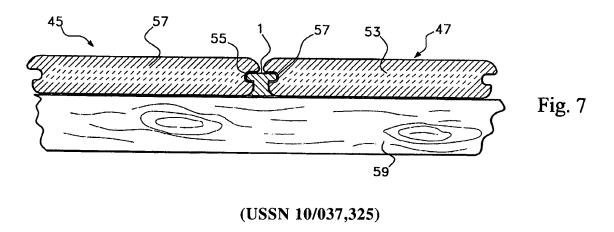
Anchoring device 1 is preferably constructed of a plastic material through which metal fasteners, such as nails, screws, staples, or the like, may conveniently be driven using ordinary carpentry tools, whereby the anchoring device is directly attached to a

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joist beam and secure anchorage of the deck surface members is provided (page 24, lines 12-16; page 32, lines 1-4; page 24, lines 1-5).

Independent claim 33 recites a decking system that comprises a plurality of decking boards and an anchoring device, which is of the type recited by claims 29-32. An embodiment of such a decking system, including the required anchoring device, is depicted by Fig. 7 of the instant specification, which is reproduced below for convenience.



As set forth by the specification, e.g. at page 31, line 14 to page 32, line 7, first and second horizontal beams (decking boards) 45 and 47 are secured to joist beam 59 using anchoring device 1. Claim 33 delineates an anchoring device having the same features and support as the device recited by claim 29, which is described by the specification as set forth above. Horizontal beams 45, 47 are preferably composed of synthetic polymers, at least partially foamed synthetic polymer, wood, wood composite,

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and combinations thereof, e.g. as taught by originally-filed claims 10 and 20. Each decking board has a top, a bottom, two sides, and two ends. Slots 55 and 57 preferably are pre-cut in the respective sides of beams 45 and 47 and preferably extend along the entire length of the beams (page 25, lines 6-10. The decking system is installed by placing first beam 45 atop joist beam 59, inserting a side of anchoring device 1 into slot 55, and securing anchoring device 1 to joist beam 59 by driving a fastener, such as a nail, staple, or screw (not shown), through device 1 into joist beam 59 (page 31, line 14 to page 32, line 7). Thereafter, beam 47 is placed alongside beam 45 atop joist beam 59, and slid so that the side of anchoring device 1 opposite beam 45 engages slot 57 (page 32, lines 8-13).

A sufficient number of such anchoring devices 1 are used to provide adequate attachment of the beams 45, 47 to the supporting joist beam 59. The process is repeated to provide a sufficient number of substantially parallel horizontal beams that together provide a decked area of the desired dimensions. Ordinarily, an anchoring device 1 is used to attach each adjacent pair of horizontal beams comprising the finished deck structure at each point at which the horizontal beams cross a joist beam of the supporting structure. In ordinary construction practice, the horizontal beams are installed with their long direction substantially perpendicular to the long direction of a plurality of parallel joists, although other orientations, such as horizontal beams oriented at 45° with respect to the joist direction may also be used, e.g. based on aesthetic considerations.

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Claim 30 depends from claim 29 and calls for the vertical support member

to have a plurality of recesses with support columns located therebetween. See, e.g.,

Fig. 2, and page 28, lines 12-13, depicting recess 17 and support columns 19. Claim

34 (dependent from claim 33) similarly limits the anchoring device used in the claimed

decking system of claim 33 by requiring the foregoing recesses and support columns.

Claims 31 and 32 depend from claim 29 and respectively require an

anchoring device wherein the two sides of the top element are symmetric and parallel to

one another. See, e.g., Figs. 1 and 3, providing walls 5 and 9 that are parallel (page 27,

lines 10-11) and symmetric (lines 13-15). See also page 31, lines 9-11. Claims 35 and

38 (dependent from claim 33) similarly limit the anchoring device used in the decking

system of claim 33 by respectively requiring the sides to be symmetric and parallel

relative to one another.

Claim 36 calls for the groove in the decking boards to establish an upper

half of the boards above the groove and a lower half below the groove, wherein the

upper half has a greater width than the lower half. Boards having this configuration are

taught at page 25, lines 11-13.

Claim 37 parallels originally-filed claim 10.

The use of the anchoring devices to secure the horizontal beams in the

manner depicted by Fig. 7 permits a deck structure to be installed without any

mechanical fasteners penetrating the exposed, finished top surface of the horizontal

¹ Note that the recitation of column "15" at line 13 is a typographical error, as "19" should have been

set forth in correspondence with Fig. 2

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beams. The holes and defects created by conventional construction, in which screws,

nails, or the like are driven directly through the horizontal beams' surface into the

supporting structure are aesthetically undesirable, and are prone to cause injury to the

feet of persons walking barefoot on the surface. In addition, the holes or defects

frequently will collect water, dirt, and other debris.

As noted above, a decking system constructed using the foregoing anchoring

devices provides an aesthetically pleasing and functionally sound construction.

Carpenters can install the decking system rapidly and efficiently, using familiar tools,

equipment, and skills. By way of contrast, some prior art systems for attaching decking

members without using fasteners driven through the finished surface require the

fasteners to be driven in an upward direction into the bottom of each decking member.

The installer is thus forced to work in a position underneath the deck surface and the

supporting joists. Such a position is often cramped, awkward, and difficult, if access is

even possible. However, the present system is installable from above the floor surface,

affording a much more comfortable working environment for the installer.

Applicant respectfully acknowledges that an objection was lodged against

the drawings in the instant application in the Office Action dated June 14, 2004.

Specifically, the Examiner objected to the cross-hatching for element 1 in Fig. 5 as

submitted on September 12, 2003, it having been indicated that the hatching was

incorrect for plastic material, notwithstanding the Examiner's initial acceptance of these

drawings in an earlier Office Action dated December 24, 2003. Applicant is prepared

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to resubmit these amended drawing figures upon indication of allowable subject matter in the present application.

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(VI) Grounds of Rejection To Be Reviewed on Appeal

(A) Whether claims 29, 31, and 32 should be rejected under 35 U.S.C. §102(b) as being anticipated by Great Britain Patent Publication GB 1,350,754;

- (B) Whether claims 33 and 35-38 should be rejected under 35 U.S.C. §102(e) as being anticipated by US Patent 6,363,677 to Chen et al.;
- (C) Whether claims 29 should be rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent 5,704,181 to Fisher et al.;
- (D) Whether claim 30 should be rejected under 35 U.S.C. §103(a) as being unpatentable over Fisher et al. in view of US Patent 6,442,908 to Naccarato et al.;
- (E) Whether claim 33 should be rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent 556,998 to Major in view of Fisher et al.; and
- (F) Whether claim 34 should be rejected under 35 U.S.C. §103(a) as being unpatentable over Major in view of Fisher et al. and further in view of Naccarato et al.

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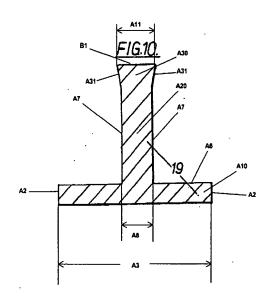
(VII) Arguments

A. The anchoring device of claims 29, 31, and 32 meets the conditions for patentability.

The Examiner has rejected claims 29, 31, and 32 under 35 U.S.C. §102(b) as being anticipated by Great Britain patent GB 1,350,754 ("the British patent"). on the following basis:

Claims 29, 31 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Great Britain patent, GB-1,350,754 (see marked-up attachment).

For the convenience of the Board, a copy of Figure 10 of the British patent, including the aforementioned markings added by the Examiner, is reproduced below.



(GB 1,350,754, as annotated by the Examiner)

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The British patent relates to the mounting of ceramic tiles on walls and

similar substantially upright surfaces, and on floors and similar horizontal surfaces.

The tiles are secured in position by a fixative preparation coated on the back surfaces of

the tiles that adheres them to an underlying surface. In a conventional installation

process, the fixative is allowed to attain strength, and thereafter a grouting medium is

fed into the joints between adjacent tiles to fill up the joint spaces and provide a

satisfactory finished appearance to the tiled surface.

Thus, the invention delineated by the British patent is said to "consist in a

single square or oblong tile for mounting in position...and having already affixed to it

before being so mounted a preformed grouting strip along one or two edges only of the

tile and visible from the face of the tile, the arrangement being such that when the tile

with the grouting strip or strips affixed to it is mounted in position the grouping strips

serve to space adjacent tiles apart by a predetermined distance." Page 1, lines 39-50,

emphasis added.

1. Independent claim 29 meets the conditions for patentability because

the British patent does not disclose or suggest the anchoring device of claim

29.

Further with respect to claim 29, and referring to the reference

designations he provided, the Examiner provides the following basis for his rejection:

Regarding claim 29, the British patent discloses, in Figure 10, an anchoring

device consisting essentially of a substantially flat horizontal top element A10, at

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least one substantially vertical support member A20, and a substantially flat The top element A10 has a top view horizontal bottom element A30. configuration including two sides A2 and a predetermined first width A3 as measured side to side. The first width A3 is measured at a maximum width between the sides A2. The top element A10 has an imaginary center line A4. The support member A20 is attached to an underside A6 of the top element A10 along the center line A4² and the support member A20 extends downwardly therefrom. The support member A20 has two sides A7 and a predetermined second width A8 as measured side to side at a maximum width. The bottom element A30 has a flat bottom view configuration, which includes sides A31 and having a generally trapezoidal shape, and a predetermined third width A11 as measured side to side at a maximum width at a trapezoidal base B1. The first width A3 is greater than the second width A8 and the third width A11. The third width A11 is greater than the second width A8. The device is made of molded plastic material (column 4, lines 72-84).

Applicant respectfully traverses the Examiner's contention that the British patent discloses every structural feature of the anchoring device delineated by claim 29, as would be required for a proper rejection under 35 USC §102(b).

More specifically, applicant maintains that a person having ordinary skill would not regard the British patent as having disclosed applicant's anchoring device, within the meaning of that term as used in the instant application. As set forth above, the allegedly anticipatory article of the British patent, e.g. as depicted by Fig. 10 thereof, is denominated a "preformed grouting strip." The function of this strip is said to be spacing the tiles apart by a predetermined distance. See col. 2, lines 46-50. There is no disclosure or suggestion that the strip plays any role in anchoring the ceramic tiles with which it is associated to a wall or floor surface, or even that the grouting strip could be used in such a manner. Instead, that anchoring function is provided by a

² Sic – Appellant is unable to locate any designation of A4 in the Examiner's annotations of Fig. 10 of the British patent.

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fixative disposed between the back surface of the tiles and the surface (e.g. wall or subfloor) to which the tile is applied.

The preformed grouting strip of the British patent also extends at least over <u>substantially the full edge length of each tile</u>, as required to perform its grouting function. On the other hand, a person having ordinary skill in the art of deck construction would recognize that applicant's anchoring device would <u>not</u> be formed with a length corresponding to the full length of each decking board or even a substantial fraction thereof, because it would not function properly for its intended use if it were that long. Decking is typically installed in a location that exposes it to the elements, including rain, snow, and other sources of water. The individual decking boards are installed with intervening gaps, through which accumulated moisture and debris may drain. An anchoring device of extended length would effectively seal the space between adjacent decking boards, thereby preventing this drainage. A person of ordinary skill in the art would thus regard a device having the extended length of the British patent's grouting strips as not being an anchoring device for attaching decking boards to a support board.

In Motorola, Inc. v. Interdigital Tech. Corp., the Federal Circuit established boundaries governing anticipatory prior art:

"For a prior art reference to anticipate a claim, the reference must disclose each and every element of the claim with sufficient clarity to prove its existence in the prior art. See In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990) ('[T]he [prior art] reference must describe the applicant's claimed invention sufficiently to have placed a person of ordinary skill in the field of the invention in possession of it.' (citations omitted)). Although this disclosure requirement presupposes the knowledge of one skilled in the art of the claimed invention, that presumed knowledge does not grant a license to read into the prior art reference teachings that are not

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there." 121 F.3d 1461, 43 USPQ2d 1481, 1490 (Fed. Cir. 1997) (emphasis

added)

See also Scripps Clinic & Research Found. v. Genentech Inc., 927 F.2d 1565, 18

USPQ2d 1001, 1010 (Fed. Cir. 1991), in which the Federal Circuit held that "There

must be no difference between the claimed invention and the reference disclosure, as

viewed by a person of ordinary skill in the field of the invention" (emphasis added).

Appellant respectfully submits that the foregoing remarks clearly establish the existence

of structural differences of the sort that the Scripps court envisioned. In addition, the

attempt to cast the grouting strips of the British patent as being anchoring strips equally

violates the Motorola court's prohibition against reading subject matter into the

reference that is not fairly disclosed therein.

Appellant further submits that the preformed grouting material strip of the

British patent and the anchoring device are properly distinguished under the standard

articulated in Union Oil Co. of Cal. v. Atlantic Richfield et al., 208 F.3d 989, 994, 54

USPQ2d 1227 (Fed. Cir. 2000) (holding that a claim reciting, in its preamble, "An

unleaded gasoline suitable for combustion in an automotive engine" covered a fuel that

would regularly be used in autos, not that conceivably could be, thereby excluding from

claim scope a broader class of petroleum formulations such as aviation fuels or racing

fuels).

In the present instance, it is respectfully submitted that the <u>preformed</u>

grouting material strip of the British patent and the anchoring device of claim 29 would

be regarded by a person having ordinary skill in the art as having material structural

differences inherent in their different functions, implicating the Union Oil standard. On

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the other hand, the Examiner's contention that the preformed grout material strip can be identified as an anchoring device contravenes these standards.

The Examiner has discounted applicant's claim recitation with respect to the terminology "adapted to" as follows:

Applicant is reminded that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. Therefore, the anchoring device can be adapted to maintain the top element in a predetermined position during use for joinder of two adjacent boards pre-cut with receiving slots, and to position the bottom element upon a support board, which the two boards rest for attachment of the anchoring device to the support board for anchoring and support the two boards.

Applicant respectfully maintains that the Examiner's reliance on *In re Hutchison*, 33 CCPA 879, 154 F.2d 135, 69 USPQ 138 (CCPA 1946), for the *per se* proposition that a claim feature recited using "adapted to" terminology carries no patentable weight is erroneous.

First, the "adapted to" feature that the *Hutchison* court rejected as carrying no weight was recited in the claim <u>preamble</u>, whereas the features the Examiner has disregarded are recited using such phraseology in the <u>body</u> of claims 29 and 33. *Id.* at 154 F.2d 138. Applicant's "adapted to" limitations are no mere statements of intended use, but rather are structural limitation, albeit recited in functional language.

Second, later rulings of the Court of Claims and Patent Appeals and of its successor Federal Circuit expressly recognize functional language as carrying patentable moment limiting claim scope. See, e.g., *In re Land and Rogers*, 54 CCPA 806, 368 F.2d 866, 151 USPQ 621, 635-636 (CCPA 1966), (holding that a feature

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recited using "adapted to" terminology was admittedly "functional" but not good ground to give it "no weight" in view of the third paragraph of 35 U.S.C. 112.)

Applicant further points to the C.C.P.A.'s decision in *In re Venezia*, 530 F.2d 956, 189 U.S.P.Q. 149 (CCPA 1976), in which "adapted to" terminology was specifically recognized as conveying structural and dimensional limitations for a claim element. In particular, the court addressed a claim that recited "a pair of sleeves ... each sleeve of said pair adapted to be fitted over the insulating jacket of one of said cables." The Court ruled that:

"Rather than being a mere direction of activities to take place in the future, this language imparts a structural limitation to the sleeve. Each sleeve is so structured or dimensioned that it can be fitted over the insulating jacket of a cable. A similar situation exists with respect to the 'adapted to be affixed' and 'adapted to be positioned' limitations in the third and fourth paragraphs of the claim." *Id.* at 530 F.2d 959, 189 U.S.P.Q. 151-152.

Similar approbation of functional limitations in an apparatus claim is given in *R.A.C.C. Indust., Inc. v. Stun-Tech, Inc.*, 178 F.3d 1309, 1998 WL 834329, slip. op. at 3, 4, (Fed. Cir. 1998), citing *Intel Corp. v. U.S. Int'l. Trade Comm.*, 946 F.2d 821, 832, 20 USPQ2d 1161, 1171 (Fed. Cir. 1991). The *Intel* court held that functional language in an apparatus claim required that an accused apparatus possess the capability of performing the recited function; and that functional language properly limited the scope of claims to devices that had the recited *capability* (emphasis supplied in the *R.A.C.C.* decision).

In light of such holdings, it is submitted that the Examiner's failure to give patentable weight to the features of claims 29 and 33 recited using "adapted to" terminology is legal error. In particular, claim 29 calls for the anchoring device to be

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adapted to "maintain said top element in a predetermined position during joinder of two adjacent boards... and to position said bottom element upon a support board which said two adjacent boards rest..." Claim 33 similarly recites such an anchoring device and further calls for decking boards having grooves in at least one side, the grooves being adapted to receive the anchoring device.

Applicant maintains that the foregoing functional limitations in fact positively recite structural limitations that distinguish the anchoring device of claim 29 from any article disclosed or suggested by the British patent. There is no disclosure whatsoever in the British patent that width A8 of top element A10 is shaped and dimensioned so as to permit it to be received in a groove of any tile or other article. Significantly, Fig. 10, which the Examiner has cited, is said to be of a T-section strip appointed for use with a plain-edge tile, i.e., a tile lacking any edge groove or other like feature corresponding to the receiving slots delineated by claims 29 and 33. Page 2, col. 1, lines 11-13 and 40-43. Horizontal projections A2 of "top element" A10 are not received in any slot. Instead, element A10 is installed with its horizontal projection A2 underneath the back surface of each tile, and with the plain edge of each tile abutting sections A7 and A31 on each side of grouting strip 19.

Although not specifically referenced by the Examiner, other tile forms disclosed by the British patent have recesses that are not grooves, but instead extend through the back surface of the tile and permit an interlocking connection. See, e.g., Figs. 7-8, showing recesses 17b appointed to receive ear-like or bead-like projections 18a from a grouting strip 18. On the other hand, there is no disclosure of any tile or the

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like having a pre-cut receiving slot, as recited by claims 29 and 33. Applicant thus maintains that the Examiner has improperly read into the British patent features that are not fairly disclosed therein. Specifically it is submitted that he has read into the British patent the particular shape and dimensions of features of applicant's anchoring device. These features, which are delineated by claims 29 and 33 using "adapted to" terminology, render the anchoring device capable of carrying out the disclosed anchoring function, and thus represent a distinction predicating patentability.

The Federal Circuit has held that an invention is not obvious where one reference taught away from the combination with a second prior art reference. *In re Rudko*, 1999 U.S. App. LEXIS 9190, Civ. App. No. 98-1505, slip op. at 5-6 (Fed. Cir., 1999) (unpublished). See also *Monarch Knitting Mach. Corp. v. Sulzer Morat GmbH* ["A prior art reference may be considered to teach away when 'a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." 139 F.3d 877, 45 USPQ2d 1977, 1984 (Fed. Cir. 1998), quoting *In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130, 1131 (Fed. Cir. 1994).] and *McGinley v. Franklin Sports, Inc.* ["We have noted elsewhere, as a 'useful general rule,' that references that teach away cannot serve to create a prima facie case of obviousness." 262 F.3d 1339, 1354, 60 U.S.P.Q.2d 1001 (Fed. Cir. 2001) (citing *In re Gurley, supra*)].

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2. Dependent claims 31 and 32 meet the conditions for patentability

because the British patent does not disclose or suggest the anchoring device

of claim 29, let alone the preferred anchoring device of claims 31, and 32,

which depend from claim 29.

Further with respect to claims 31 and 32, the Examiner has provided the

following statement of rejection:

"Regarding claim 31, the two sides A2 of the top element A10 are symmetric relative to one another. Regarding claim 32, the two sides A2 of the top element

A10 are parallel to one another."

Applicants respectfully submit that claims 31 and 32 are patentable for at

least the same reasons as claim 29, from which they depend, and that the foregoing

statement does not cure the lack of disclosure or suggestion of the subject matter of

claim 29, as set forth hereinabove.

3. Conclusion.

In view of the foregoing remarks, it is submitted that present claims 29,

31, and 32 patentably define over the British patent. Accordingly, reversal of the

rejection of claims 29, 31, and 32 under 35 USC §102(b) over the British patent is

respectfully requested.

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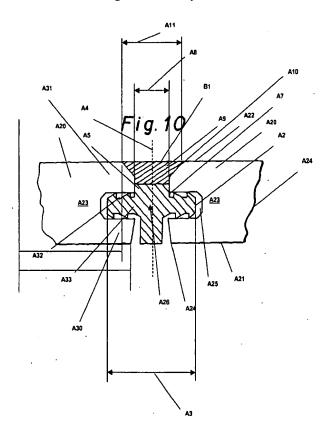
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B. The decking system of claims 33 and 35-38 meets the conditions for patentability.

The Examiner has rejected claims 33 and 35-38 under 35 U.S.C. §102(e) as being anticipated by US Patent 6,363,677 to Chen et al. on the following basis:

Claims 33 and 35-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al., 6,363,677 (see marked-up attachment).

For the convenience of the Board, a copy of Figure 10 of Chen et al., including the aforementioned markings added by the Examiner, is reproduced below.



(Chen et al., US Patent 6,363,677, as annotated by the Examiner)

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and a groove of a second tile is further used.

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Chen et al. is directed to a surface covering system which involves a series of interconnected tiles having a spline system located between the tiles to simulate the appearance of a grout. Each tile is said to have on its sides at least one tongue section and at least two groove sections. When installed, a tongue of one tile engages one of the grooves of an adjacent tile, thereby forming a gap at at least the upper surfaces between the tiles. Two types of splines are used. A first spline, having two tongue sections for interconnecting with the groove section(s) of at least one tile is inserted between a series of tiles. A second spline capable of fitting into the gap formed between two or more tiles, which are interconnected at a tongue of a first tile

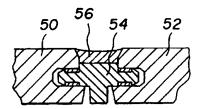
The foregoing interconnections are readily visualized with reference to Figs. 5(a) and 5(b) of Chen et al., which are reproduced below for convenience. Fig. 5(a) shows two adjacent tiles 50 and 52 having grooves in facing relationship. First spline 54 has oppositely projecting tongues that engage the corresponding grooves of tiles 50, 52. Second spline 56 fills the gap above first spline 54 which is established by full engagement of first spline 54 with tiles 50 and 52. Fig. 5(b) shows the engagement of the sides of tiles wherein the tongue of one tile mates with the groove of the adjacent tile. On this side, only second spline 56 is used. It fills the gap above the engaged tongue and groove.

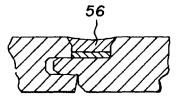
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Fig.5(a)

Fig. 5(b)





(Chen et al., US Patent 6,363,677)

1. Independent claim 33 meets the conditions for patentability because Chen et al. does not disclose or suggest the decking system of claim 33.

Further with respect to claim 33, the Examiner provides the following basis for his rejection:

Regarding claim 33, Chen discloses in Figure 5³, a decking system comprising boards A20 and an anchoring device A26. Each of the boards A20 has a top A21, a bottom A22, two sides A23 and two ends A24. At least one groove A25 is located along one of the sides A23. The anchoring device A26 consists essentially of a substantially flat horizontal top element A1,4 at least one substantially vertical support member A5, and a substantially flat horizontal bottom element A9. The top element A1 has a top view configuration including two sides A2 and a predetermined first width A3 as measured side to side. The first width A3 is measured at a maximum width between the sides A2. The top element Al has an imaginary center line A4. The support member A5 is attached to an underside A6 of the top element A1 along the center line A4 and the support member A5 extends downwardly therefrom. The support member A5 has two sides A7 and a predetermined second width A8 as measured side to side at a maximum width. The bottom element A9 has a flat bottom view configuration, which includes sides A10, and having a generally trapezoidal shape, and a predetermined third width A11 as measured side to side at a maximum width at a trapezoidal base B1. The first width A3 is greater than the second width A8 and the third width A11. The third width All is greater than the second width A8. The device is made of

³ Sic – the Examiner's annotations, including reference number designations, were made with specific reference to Fig. 10, not Fig. 5.

⁴ Sic – the reference designation of A1 does not appear in Fig. 10, as annotated by the Examiner.

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molded plastic material capable of having a metal fastener driven through (col. 7, lines 56-60).

a. Chen et al. do not disclose every structural feature of the decking system of claim 33.

Appellant respectfully traverses the Examiner's contention that Chen et al. discloses every feature of the decking system delineated by claim 33. Significantly, the Examiner has not pointed to any single structure that embodies the anchoring device included in the system of claim 33. Rather, the Examiner apparently has alleged that the combination of elements designated as first and second spline sections 54, 56 in Figs. 4(a) and 5(a) of Chen et al. constitutes such an anchoring device. As disclosed at col. 3, line 66 to col. 4, line 2, and confirmed by Figs. 5(a) and 10, these sections are clearly separate items, pictorially differentiated in the figures by distinct hatching. Importantly, second spline section 56 is usable independent of first section 54, e.g. in the Fig. 5(b) configuration.

Moreover, contrary to the Examiner's contention, the combination of items 54 and 56, even if regarded, *arguendo*, as being a single structure, does <u>not</u> have the structure recited for the anchoring device employed in the decking system of claim 33.

More specifically, the Examiner's contention that the decking system of claim 33 is disclosed by Chen et al. is submitted to be untenable under the Federal Circuit's ruling in Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick

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Co., that "Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (emphasis added). Even if, arguendo, elements 54 and 56 collectively form an "anchoring device," they are not properly arranged in Chen et al., because they are inverted from the disposition recited by claim

<u>33</u>.

Applicant respectfully submits that a person having ordinary skill in the pertinent art would regard the use of the term "top" in regard to the anchoring device delineated by feature (II.) of claim 33 as being constrained by the use of the same word "top" in reference to the decking boards of feature (I.), both in accordance with ordinary construction practice. That is to say, decking, a type of floor construction, is universally regarded as being installed on "top" of, i.e., vertically above, support structure such as floor joists. The Examiner's reading contravenes that usage. What the Examiner purports to be the anchoring device's trapezoidal "base" (i.e., second spline section 56) is instead on the top of the flooring installation of Fig. 5(a) of Chen et al., while what he identifies as the "top" of the anchoring device is on the bottom of the actual floor. The Chen et al. system is arranged differently than that of claim 33, making the Examiner's novelty rejection untenable.

The confusion arising from the Examiner's inversion of the supposed anchoring device is further compounded by the Examiner's characterization of the sides A2 as defining a width A3 of what he purports to be the top element A1 [sic]. On the other hand, claim 33 calls for an anchoring device having a "substantially flat

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horizontal top element having a top view configuration which includes two sides..." (emphasis added). Applicant respectfully submits that the allegedly anticipatory structure does not have the substantially flat horizontal top view configuration delineated by claim 33. Instead, the portion of element 54 that extends downward from the projections received in board grooves A25 in the depiction of annotated Fig. 10 (the "top" of the Chen et al. structure as apparently understood by the Examiner⁵) precludes the Examiner's conclusion, because it establishes a surface of element "A1" that is not substantially flat horizontally.

The presence of the aforesaid protrusion from the top surface is precluded from applicant's claimed anchoring device by the use of the transitional phrase "consisting essentially of." Such a protrusion would markedly change the functionality of the anchoring device, e.g. by interfering with the insertion of the metal fastener used to secure the three beams involved in the decking system.

The Examiner has discounted the use of the transitional phrase "consisting essentially of" in claim 33 as follows:

Furthermore, for the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising". See, e.g., PPG, 156 F.3d at 1355,48 USPQ2d at 1355. See MPEP 2111.03.

In the present instance, appellant is unable to locate in the record any evidence suggesting that the Examiner made a determination of whether the

⁵ It is to be understood that the Examiner's purported anticipation requires that combined elements 54 and 56 of Chen et al. be viewed in an inverted orientation. That is to say, in the depiction of Figs. 5(a) and 10, the feature supposed to correspond to the "top" of applicant's anchoring device is toward to the bottom of the figures, and the supposed "bottom" is toward the top of the figures.

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specification or claims established basic and novel characteristics of the claimed subject matter. Even less is there any indication that such characteristics have been applied in determining the effect of "consisting essentially of" on the scope of claims 29 and 33. Appellant maintains that such a determination must be made for the broadened ("comprising") construction of MPEP §2111.03 to be permissible and must be documented to permit appropriate appellate review of the propriety of the rejections. See In re Lee, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1435 (Fed. Cir. 2002) (holding that PTO must document its reasonings on the record to allow accountability and effective appellate review). Appellant respectfully draws attention to the portion of the Federal Circuit's PPG ruling that is cited in MPEP §2111.03 and on which the Examiner has relied: "PPG could have defined the scope of the phrase 'consisting essentially of' for purposes of its patent by making clear in its specification what it regarded as constituting a material change in the basic and novel characteristics of the invention." In the present instance, appellant respectfully submits that the intended claim scope is indeed apparent from the original specification and claims, and, a fortiori, in view of the file history.

Claims 29 and 33, newly presented by way of the amendment dated October 14, 2004, employed the transitional phrase "consisting essentially of." These claims correspond generally to previous claims 21 and 24, respectively. New claims 29 and 33 recite verbatim the features of old claims 21 and 24, with the transitional term "comprising" replaced by "consisting essentially of," along with the further inclusion of the feature of former dependent claims 23 and 26, which called for the anchoring device

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to be made a molded plastic material. The newly presented claims employ "consisting essentially of" in one instance each, both referring to the anchoring device.

Appellant respectfully submits that the replacement of the open term "comprising" with the partially closed transitional phrase "consisting essentially of" in claims 29 and 33 clearly signals applicant's understanding of claim scope, in accord with firmly established Patent Office practice: "The transitional phrase 'consisting essentially of' limits the scope of a claim to the specified materials or steps 'and those that do not materially affect the basic and novel characteristic(s)' of the claimed invention." MPEP \$2111.03, quoting *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976) (emphasis in original). Such usage, articulated long ago in *Ex parte Davis*, 80 USPQ 448, 450 (Pat. Off. Bd. App. 1948), has since been repeatedly affirmed. See, e.g., *AK Steel Corp. v. Sollac*, 344 F.3d 1234, 1239, 68 USPQ2d 1280 (Fed. Cir. 2003).

Significantly, applicant's October 14, 2004 amendment addressed the rejection of claim 21 over Zibell by arguing that "Clearly Zibell has essential elements not in the present invention device, to wit, plural center post sections including component 78 of Figure 11 of Zibell, and the non-flat bottom of Zibell below the post section 78 of that Figure. Since all of the claims state that the device consists essentially of the elements set forth in the claims, the rejection should be withdrawn" (pages 8-9).

Appellant respectfully submits that the specification and file history of the present application provide sufficient basis for understanding the ambit of the present

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claims. That is to say, the specification recites those basic and novel characteristics of the anchoring device that would be materially affected by the presence of elements in an embodiment that would be outside the scope of the claim, and thus excluded by use of the "consists essentially of" transitional phrase. For example, it is submitted that Chen et al. discloses a portion of element 54 extending downward from the projections received in board grooves A25 in the depiction of annotated Fig. 10 (the "top" of the Chen et al. structure as apparently understood by the Examiner⁶). The presence of such a portion establishes a surface of element "A1" that is not substantially flat horizontally. This non-flat surface takes the cited structure outside the scope of claims 29 and 33, the downwardly extending portion being excluded by the language of claims 29 and 33. Appellant thus maintains that the purported anticipation of claim 33 by any structure disclosed by Chen et al. is precluded.

b. The spline system of Chen et al. is <u>not</u> an anchoring device, as required by claim 33.

Like the supposed "anchoring" device of the British device discussed hereinabove in connection with the rejection of claims 29, 31, and 32, the Chen et al. multi-part spline system also is <u>not</u> an anchoring device. Nothing in the Chen et al. reference discloses or suggests that elements 54, 56 in combination be used in any manner to mutually secure three boards together, i.e., to secure two adjacent decking

⁶ See note [4] above concerning the inversion of the allegedly anticipatory Chen et al. structure.

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boards to a third support board. At best, the Chen et al. spline system attaches horizontally adjacent tiles, but nothing discloses or suggests the attachment of elements 54 or 56, whether singly or in combination, to an underlying support board, whereby the three boards are mutually secured. In fact, the Chen et al. reference is even devoid of any disclosure or suggestion that the tiles or splines used in the surface covering system be adhered in any way to an underlying support structure. On the other hand, it is known in the art that interlocking tiles, such as those of Chen et al., are often disposed as a flooring system in a "floating" manner, wherein no fixed attachment to the underlying support is used.

The Chen et al. reference further teaches that the spline system located between the tiles of the surface covering system "simulate[s] the appearance of grout." Abstract, line 2. A person of ordinary skill in the surface covering art would recognize that grout is conventionally installed to fill the gaps between adjacently installed tiles along the entire length of each side of the tiles. The importance of such filling is explicitly recognized, e.g. at col. 8, lines 26-30. As set forth hereinabove in connection with the rejection of claims 29, 31, and 32 over the British patent, decking systems such as the instant system are installed in exterior locations with gaps intentionally left between adjacent decking boards, to permit drainage of water, e.g. as the result of rain or snow falling onto the exposed surface. Were the spline system of Chen et al. to be used in constructing the present decking system, that drainage function would be thwarted. On the other hand, were applicant's anchoring devices used in conjunction with tiles of the type provided by Chen et al., the function of simulating grouting would

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be lost. Accordingly, applicant maintains that a person having ordinary skill would not

regard Chen et al. as having disclosed every feature of applicant's anchoring device and

decking system. In addition, there is no motivation provided that would induce a

skilled artisan to modify the spline system of Chen et al. to provide applicant's

anchoring device.

Still further, nothing in the present specification suggests any anchoring

device wherein the top surface of the device is at a level permitting it to simulate a

grouted joint. Such a location is precluded, because the portions of the top surface

distal from the center support are engaged in the decking boards' receiving slots, which

inherently are below the top surface of the boards. Chen et al., on the other hand,

employs the spline system to function as simulated grouting, requiring the top of the

spline system to be at or near the top surface of the tiles with which the splines are

used.

2. Dependent claims 35 and 37 meet the conditions for patentability

because Chen et al. does not disclose or suggest the decking system of base

claim 33, let alone the preferred decking system of dependent claims 35 and

37.

With respect to claims 35 and 37, the Examiner provides the following

bases for his rejection:

Regarding claim 35, the two sides A2 of the top element A1 are symmetric to one

another.

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Regarding claim 37, the boards A20 are made of material selected from the group consisting of synthetic polymers, at least partially foamed synthetic polymers, wood, wood composite, and combinations thereof (col. 4, lines 22-50).

It is respectfully submitted that the foregoing statements do not materially add any subject matter pertinent to the earlier statement of rejection of claim 33 over Chen et al. Accordingly, it is submitted that the subject matter of claims 35 and 37 is not disclosed or suggested by Chen et al., for at least the same reasons as claim 33, on which they both depend.

3. Dependent claim 36 meets the conditions for patentability because Chen et al. does not disclose or suggest the decking system of base claim 33, let alone the preferred decking system of dependent claim 36.

With respect to claim 36, the Examiner provides the following basis for his rejection:

Regarding claim 36, the groove A25 establishes an upper half A30 of each of the boards A20 above the groove A25 and a lower half A31 of each of the boards A20 below the groove A25. The upper half A30 has a greater width than the lower half A31. Compare widths A32 and A33.

Appellant respectfully submits that the statement of rejection of claim 36 perpetuates the inversion of top and bottom discussed in detail in Section (VII) B.1.a. above with respect to the rejection of base claim 33 over Chen et al. While appellant

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agrees that features A23 establish an upper half and a lower half of the Chen et al. tiles, appellant emphatically disagrees that sections A30 and A31 can properly be regarded as "upper" and "lower" halves, respectively. Instead, it is submitted that "upper" and "lower" must be determined in light of the usage of the Chen et al. specification, wherein it is clearly indicated that the trapezoidal portion (56) of the combined spline system is installed at the level of the "upper" or "top" surface of each tile. Each Chen et al. tile is said to have a "top surface and a bottom surface." Col. 4, line 3. A person having ordinary skill in the tiling art would indubitably regard grout, for which second spline 56 substitutes in the Chen et al. system, as being disposed on the finished side of a tiled surface, i.e. the "upper" or "top" side of a tiled floor. Attention is further drawn to claim 1, at col. 9, lines 56-57, which defines "a gap" as being formed on the "upper surface between the two tiles." The second spline (e.g., element 56 of Figs. 4-6) is required to be "capable of fitting into said gap" (line 62). It is respectfully submitted that this recitation clearly defines Chen et al.'s usage of the terms "top," "bottom," "upper," and "lower," in direct contradiction to the Examiner's reading, which requires inversion of top and bottom. There is no reasonable basis for suggesting that the Chen et al. decking system be installed upside-down from the ordinary sense conveyed by the depiction of the Figures, or that the Figures are to be regarded as being drawn in an inverted fashion.

The Examiner contends that width A32 of tile portion A30 is wider than width A33 of tile portion A31. Appellant completely agrees. However, it is thus submitted that when the upper and lower halves of the Chen et al. tiles are properly

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identified, Chen et al. teaches a width ordering (A32 > A33) that is exactly opposite the

requirement of claim 36, that upper-half board width (W_{TB} of Fig. 8) be greater than

lower-half board width (W_{BB} of Fig. 8).

4. Dependent claim 38 meets the conditions for patentability because

Chen et al. does not disclose or suggest the decking system of base claim 33,

let alone the preferred decking system of dependent claim 38.

With respect to claim 38, the Examiner provides the following basis for

his rejection:

Regarding claim 38, the two sides A2 of the top element A1 are parallel to one

another.

For the reasons set forth above in Section (VII) B.1.a. concerning the

rejection of base claim 33, appellant maintains that sides A2 cannot properly be

regarded as the sides of top element A1, because it is the downwardly projecting feature

of first spline 54, which must be regarded as the top element of the purported anchoring

device disclosed by Chen et al.

5. Conclusion.

In view of the foregoing remarks, it is submitted that present claims 33

and 35-38 patentably define over Chen et al. Accordingly, reversal of the rejection of

claims 33 and 35-38 under 35 USC §102(e) over Chen et al. is respectfully requested.

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C. The anchoring device of claim 29 meets the conditions for patentability.

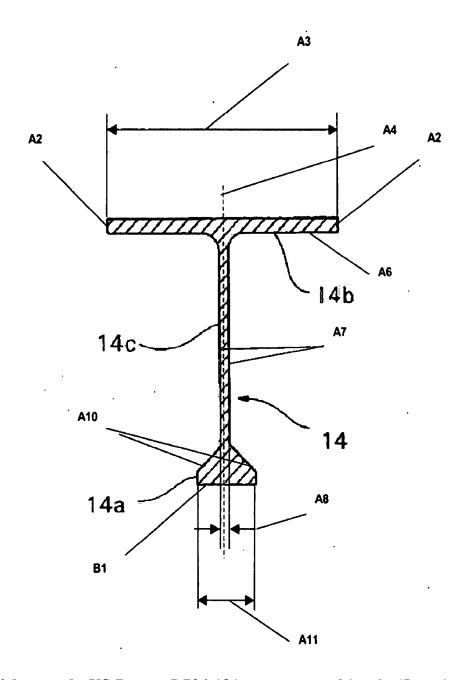
The Examiner has rejected claim 29 under 35 U.S.C. §103(a) as being unpatentable over US Patent 5,704,181 to Fisher et al. on the following basis:

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher et al., 5,704,181 (see marked-up attachment).

For the convenience of the Board, a copy of the Examiner's marked-up version of Figure 3 of Fisher et al. is reproduced below.

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(Fisher et al., US Patent 5,704,181, as annotated by the Examiner)

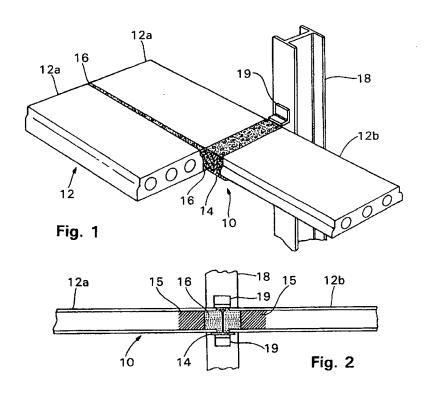
Fisher et al. discloses a structural framing system and associated method for the construction thereof. The framing system is readily visualized in the depictions

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of Figs. 1-2 of Fisher et al., which are reproduced below for the convenience of the Board.



(Fisher et al., US Patent 5,704,181)

With reference to Figs. 1-2 and Fig. 3, there is seen specially configured dissymmetric steel beam 14 (details shown in Fig. 3 as reproduced above), which is horizontally disposed and supported between adjacent vertical columns 18 erected on conventional foundations. Framing system 10 further comprises a series of concrete plank sections 12 installed in successive pairs 12a, 12b and joined together along either side of beam 14 using a high-strength grout material 16. Col. 2, lines 46-62. Plank sections 12 are said to be of conventional precast and prestressed, hollow core concrete construction. They are intended to have a substantially uniform thickness ranging from

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6 to 12 inches, and span between adjacent structural steel vertical columns 18. Col. 2, lines 63-67. The construction assembly is said to involve first the placement and anchoring of beam 14 in a substantially horizontal position between adjacent vertical columns 18 supported upon, and connected to, seats 19 using conventional structural connection means. Col. 3, lines 36-39. Then the plank sections are placed onto the bottom flange of beam 14, on which they rest. Lines 42-55. The use of a high strength grout 16 is a further required component of the structural system. The grout is premixed and injected so that it completely fills the cavity and totally encases the dissymmetric beam 14. Lines 61-64. Significantly, no flange of beam 14 is received in any groove of the plank sections it supports.

Attention is further drawn to the characterization of the Fisher et al. beam 14 as being a "specially-configured steel dissymmetric beam" (col. 2, lines 52-53). Appellant submits that the foregoing "special configuration" refers, *inter alia*, to the particular dimensioning required to permit the beam 14 to carry out its appointed functions. Specifically, beam 14 is used to support massive concrete planks 12, thereby imposing definite requirements of dimension and strength. Lower flange 14b must be sufficiently wide and thick to permit it to support concrete planks 12a and 12b, which rest upon it, both during the assembly and subsequent to the placement of grouting material 16. Lower flange 14b must also permit the flange to be placed on seats 19, to which flange 14 is connected "using conventional means for making the structural connection thereto" (col. 3, lines 36-38).

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1. Independent claim 29 meets the conditions for patentability because Fisher et al. does not disclose or suggest the anchoring device of claim 29.

With respect to claim 29, the Examiner provides the following basis for his rejection:

Regarding claim 29, Fisher et al. disclose, in Figure 3, an anchoring device comprising a substantially flat horizontal top element 14b, at least one substantially vertical support member 14c, and a substantially flat horizontal bottom element 14a. The top element 14b has a top view configuration including two sides A2 and a predetermined first width A3 as measured side to side. The first width A3 is measured at a maximum width between the sides A2. The top element 14b has an imaginary center line A4. The support member 14c is attached to an underside A6 of the top element 14b along the center line A4 and the support member 14c extends downwardly therefrom. The support member 14c has two sides A7 and a predetermined second width A8 as measured side to side at a maximum width. The bottom element 14a has a flat bottom view configuration which includes sides A10 and having a generally trapezoidal shape, and a predetermined third width A11 as measured side to side at a maximum width at a trapezoidal base B1. The first width A3 is greater than the second width AS and the third width A11. The third width A11 is greater than the second width A8.

However, Fisher et al. fail to disclose the device made of molded plastic material. Applicant is reminded that, within the general skill of a worker in the art, selecting a known material on the basis of its suitability for the intended use is a matter of obvious design choice. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the device of plastic. *In re Leshin*, 125 USPQ 416. Furthermore, it is well known that plastic material is capable of having a metal fastener driven through.

It is settled law that to predicate a *prima facie* case of obviousness, evidence must be adduced establishing <u>all</u> of the following criteria:

- There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skilled in the art, to modify the references;
- There must be a reasonable expectation of success; and
- The prior art must teach or suggest all of the claimed limitations.

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The teaching or suggestion to make the claimed combination and the

reasonable expectation of success must both be found in the prior art, and not based on

applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)

and MPEP §2142. The art of record must disclose or suggest every feature of the

claims to permit a prima facie case of obviousness to be sustained. In re Wilson, 424

F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970) and MPEP §2143.03.

Appellant respectfully submits that the foregoing statement of rejection

does not satisfy these criteria.

a. Independent claim 29 meets the conditions for patentability

because Fisher et al. does not disclose or suggest every

feature of the anchoring device of claim 29.

There is no disclosure or suggestion in Fisher et al. of the dimensions or

functionality of the anchoring device of claim 29. In particular, the Fisher et al.

dissymmetric steel beam is not sized to permit it to maintain the top element in a

predetermined position during use for joinder of two adjacent boards which have been

pre-cut with receiving slots, and to position the bottom element upon a support board

which the two adjacent boards rest for attachment of the anchoring device to the support

board for anchoring and support of the two adjacent boards. As would be recognized by

a person having ordinary skill in the construction arts, decking boards of the type

employed in the present invention most commonly have a thickness ranging from about

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0.5 to 2 inches thick, whereas the concrete planks employed in the Fisher et al. construction are said to have a substantially uniform thickness which may range from about 6 to 12 inches. Col. 2, line 67 to col. 3, line 1. Put simply, Fisher's planks are vastly larger and heavier. Moreover, nothing in the construction of the dissymmetric structural steel beam 14 of Fisher et al. adapts it to be maintained in the predetermined position recited by claim 29, nor is it appointed for use with adjacent boards which have been pre-cut with receiving slots. The concrete planks 12a, 12b have no such receiving slots or, indeed, slots of any form. Instead, the dissymmetric structural steel beam 14 must be used in conjunction with high-strength grout 16, whereas applicant's decking system employs no such grout.

Still further, attention is respectfully drawn to the Examiner's unacknowledged modification of Fig. 3. In particular, the Examiner's annotated Fig. 3 has been inverted with respect to Fig. 3 as it was originally presented in Fisher et al. The original orientation of Fig. 3 places the largest width of beam 14 (denoted as A3 by the Examiner) on the bottom, corresponding to its disposition in the finished construction shown in Figs. 1 and 2. By way of contrast, and without notice, the Examiner has placed the largest width (i.e. the width of flange 14b) on the top of the altered drawing. Appellant maintains that "top" and "bottom" as used in the instant specification are terms of ordinary language. They have not been imbued with any special technical meaning by applicant or by any of the prior art references applied. It is submitted that the examiner's alteration is repugnant to ordinary meaning and thus impermissible, absent clear evidence to substantiate the change. The distinction

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between "top" and "bottom" is not a matter of mere semantics, because the "bottom" of Fisher et al.'s dissymmetric structural steel beam 14 is defined by its function of supporting planks 12a, 12b. Clearly, the inversion of beam 14 in an actual building structure employing the construction depicted by Figs. 1 and 2 of Fisher et al. would have disastrous consequences. Were the Fisher et al. beam installed in the inverted position, it inherently could not support the concrete planks, which would have to rest on an angled surface of the trapezoidal "bottom," not on a flat surface. Clearly, no skilled artisan would contemplate such a configuration. The Fisher et al. reference does not disclose or suggest any function for dissymmetric structural steel beam 14 used in the inverted position implied by the Examiner's recasting of Fig. 3.

b. Independent claim 29 meets the conditions for patentability because motivation to modify the Fisher et al. disclosure has not been established.

The Examiner has also admitted that Fisher et al. fails to disclose an anchoring device made of a molded plastic material, but contends that it would have been obvious to one having ordinary skill in the art to make the device of plastic, citing *In re Leshin*, 125 USPQ 416.

Applicant submits that the Examiner's reliance on *Leshin* is misplaced, it being the application of a *per se* rule of obviousness ruled impermissible in *In re Ochiai*, 71 F.3d 1565, 1572, 37 USPQ2d 1127, 1133 (1995) (holding that "Reliance on *per se* rules of obviousness [by the USPTO] is legally incorrect and must cease.")

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absence of applicant's own disclosure.

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In the present instance, appellant maintains that a person of ordinary skill in the art would indubitably recognize that it would be impossible to substitute any known plastic for structural steel in the Fisher et al. dissymmetric beam. No plastic structure would conceivably have sufficient strength for it to support 6 - 12 inch thick concrete planks. The Examiner has not pointed to any reasonable motivation for changing the Fisher et al. material, apart from hindsight afforded by the present application. Furthermore, it would be impossible to drive a metal fastener through the Fisher et al. steel beam, as required by claim 29. Appellant thus maintains that the use of a material through which a fastener can be driven provides a technical function on which

See also In re Gal, 980 F.2d 717, 25 USPQ2d 1076 (Fed. Cir. 1992) wherein a finding of "obvious design choice" was precluded where the claimed structure and the function it performed were different from the prior art. Applicant submits that the anchoring function of the present plastic anchoring device and the support function of the Fisher et al. dissymmetric steel beam are sufficiently different to invoke the Gal rule, negating the Examiner's finding of "obvious design choice."

patentability may be predicated, and which would be unexpected and surprising in the

See also In re Chu, 66 F.3d 292, 36 USPQ2d 1089, 1095 [Fed. Cir. 1995], holding that Chu's technical evidence relating to the frailty of fabric filters during pulse-jet cleaning clearly counters the assertion that placement of the catalyst in the baghouse is merely a "design choice." Specifically, the Court held that Chu's evidence regarding the violent "snapping" action during pulse-jet cleaning, the difficulty in

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stitching compartments including the capacity to withstand high temperatures, and problems encountered from variable path lengths due to settling of the catalyst particles in each compartment militated against a conclusion that placement of the SCR catalyst was merely a "design choice."

The Federal Circuit has consistently held that obviousness cannot be predicated merely on finding the recited elements in a single references or a combination of references. *Symbol Technologies, Inc. v. Opticon, Inc.*, 935 F.2d 1569, 1576, 19 USPQ2d 1241, (Fed. Cir. 1991) ["We do not 'pick and choose among the individual elements of assorted prior art references to recreate the claimed invention,' but rather, we look for 'some teaching or suggestion in the reference to support their use in the particular claimed combination.", quoting *Smithkline Diagnostics, Inc. v. Helena Laboratories Corp.*, 859 F.2d 878,887, 8 USPQ2d 1468, 1475 (Fed. Cir. 1988)].

Applicant respectfully maintains that the Examiner has not adduced any evidence, whether in Fisher et al. itself or elsewhere, that establishes motivation for a skilled artisan to make the particular combination of elements, configured in the manner delineated by the present claims, including claim 29. It is thus submitted that the motivation proposed by the Examiner is improper as being a hindsight reconstruction under the test of *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ 2d 1453, 1457 (Fed. Cir. 1998):

". . . 'virtually all [inventions] are combinations of old elements.' Environmental Designs, Ltd. v. Union Oil Co., 713 F.2d 693, 698, 218 USPQ 865, 870 (Fed. Cir. 1983); see also Richdel, Inc. v. Sunspool Corp., 714 F.2d 1573, 1579-80, 219 USPQ 8, 12 (Fed. Cir. 1983) ('Most, if not all, inventions are combinations and mostly of old elements.'). Therefore an examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to

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negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be 'an illogical and inappropriate process by which to determine patentability." Sensonics, Inc. v. Aerosonic Corp., 81 F.3d 1566, 1570, 38 USPQ 2d 1551, 1554 (Fed. Cir. 1996).

The court has articulated a similar warning in *In re Kotzab*, 55 USPQ 2d 1313, 1318 (Fed. Cir. 2000):

"Further, a rejection cannot be predicated on the mere identification in [the reference] of individual components of claimed limitations. Rather, particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed."

It is respectfully submitted that the Examiner has not provided any motivation to re-dimension the Fisher et al. dissymmetric steel bean so that it could carry out the function of supporting the decking structure in the configuration delineated by claim 29, apart from the hindsight of the present specification and claims. The need for such a substantial reconstruction is submitted to negate any finding of obviousness. *In re Ratti*, 270 F2d 810, 123 USPQ 349 (C.C.P.A. 1959).

Furthermore, the reconstruction proposed by the Examiner would require elimination of the critical grouting taught by Fisher et al. Applicant's decking system would be unworkable if installed with grouting in the manner taught by Fisher et al., because the gaps between decking boards that permit

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collected water to drain would thereby be sealed. In re Gordon, 733 F.2d 900, 902,

221 USPQ 1125, 1127 (Fed. Cir. 1984).

c. Independent claim 29 meets the conditions for patentability

because Fisher et al. is non-analogous art.

Fisher et al. is directed specifically to techniques for construction using

precast concrete planks with a steel supporting structure, whereas applicant's claims

relate to construction using wood and wood-like decking boards and supporting

framing. Appellant respectfully submits that these construction forms, materials, and

techniques are so disparate that a skilled artisan would not be motivated to consider the

Fisher et al. disclosure as pertinent to the particular problems of attaching decking

boards to supporting beams of the type delineated by claims 29-38. Accordingly, it is

submitted that Fisher et al. is not properly considered to be analogous art.

4. Conclusion.

In view of the foregoing remarks, it is submitted that present claim 29

patentably defines over Fisher et al. Accordingly, reversal of the rejection of claim 29

under 35 USC §103(a) over Fisher et al. is respectfully requested.

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D. The anchoring device of claim 30 meets the conditions for patentability.

The Examiner has rejected claim 30 under 35 U.S.C. §103(a) as being unpatentable over US Patent 5,704,181 to Fisher et al. in view of US Patent 6,442,908 to Naccarato et al. on the following basis:

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher et al., 5,704,181, as applied to claim 29 above, and further in view of Naccarato, 6,442,908.

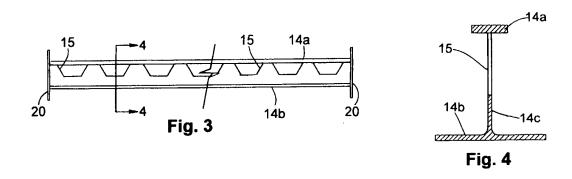
Regarding claim 30, Fisher et al., as modified above, fail [to] disclose the vertical support member 14c having recesses with support columns located therebetween. Naccarato et al. teach, in Figs. 4 and 5, a vertical support member 14c having recesses 15 to promote optimal flow of grout material through the support member (col. 5, lines 29-35). Therefore, as taught by Naccarato et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to include recesses in the vertical support member to promote optimal flow of grout material through the support member. Applicant is reminded that columns will be inherently located between the recesses as shown in Figure 3 of Naccarato et al.

Applicants respectfully note that the same three inventors are named in the Fisher et al. and Naccarato et al. patents, with only the ordering of the three names being different. In addition, Naccarato et al. delineates an overall structural framing system and method that are substantially similar to those of the Fisher et al. disclosure, as is apparent from a comparison of the respective Figs. 1-2 of each patent. Both Fisher et al. and Naccarato et al. disclose a dissymmetric steel beam having generally similar configuration and dimensions. Whereas the Fisher et al. beam is of generally solid construction, the Naccarato et al. beam has plural spaced, rectilinear or curvilinear openings 15. See col. 4, lines 54-56, of Naccarato et al. and also its Figs. 3-4, which are reproduced below for convenience. The openings 15 are said to promote optimal

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flow of the grout material 16 through and along the beam within the encasement area during construction. Col. 5, lines 31-34. The framing construction and all materials are otherwise similar.



(Naccarato et al., US Patent 6,442,908)

1. Claim 30 meets the conditions for patentability because Fisher et al. and Naccarato et al., whether taken singly or in combination, do not disclose or suggest every feature of the anchoring device of claim 30.

It is respectfully submitted, for the reasons set forth above, that Naccarato et al. does not materially supplement the teaching of Fisher et al. At best, Naccarato et al. discloses perforation of the Fisher et al. dissymmetric steel beam, but it does not otherwise suggest changing its dimensions or basic functioning. The perforation would, if anything, require increasing the thickness of the remaining portions of the dissymmetric steel beam to compensate for material removed. The overall concrete and steel structures taught by the respective patents are virtually identical. Accordingly, it

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is submitted that even the addition of Naccarato et al. does not cure the lack of

disclosure or suggestion of the anchoring device of claim 29, from which claim 30

depends. Even less does the combination of the references disclose applicant's claimed

anchoring device having a plurality of recesses with support columns located

therebetween. It is respectfully submitted that the perforated dissymmetric steel beam

of Naccarato et al. still does not disclose or suggest the far smaller molded plastic

anchoring device of claim 30.

2. Claim 30 meets the conditions for patentability because motivation

to combine and modify the Fisher et al. and Naccarato et al. disclosures has

not been established.

Appellant has set forth reasons in Section VII.C.2. to establish that there

is no motivation to modify any structure provided by Fisher et al. to reach the anchoring

device of claim 29. It is respectfully maintained that those reasons apply with equal

force to establish that there is no motivation to modify even the combination of Fisher

et al. and Naccarato et al. to reach the anchoring device of claim 29, or that of claim 30

dependent therefrom.

The Examiner has contended that it would have been obvious to include

recesses in the vertical support member to promote optimal flow of grout material

through the support member. While Naccarato et al. admittedly discloses that a

perforated dissymmetric steel beam permits a better grout flow than the solid beam

provided by Fisher et al., appellant respectfully submits that this supposed motivation

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has no pertinence to the anchoring device of claims 29 and 30. Clearly, no grouting is

disclosed or suggested by the present application. The Examiner has not pointed to any

other motivation to suggest the use of the present anchoring device in conjunction with

grout. To the contrary, the present decking system would be unworkable, were it to be

installed with grouting in the manner taught by Fisher et al. and/or Naccarato et al.,

because the gaps between decking boards that permit collected water to drain would

thereby be sealed.

Accordingly, it is submitted that no motivation for the combination of

Fisher et al. and Naccarato et al. in the manner proposed by the Examiner has been

provided, nullifying the propriety of the present rejection.

3. Claim 30 meets the conditions for patentability because neither

Fisher et al. nor Naccarato et al. is analogous art.

The reasons set forth above in Section VII.C.3. with respect to Fisher et

al., are submitted to apply with equal force to Naccarato et al., which also discloses a

concrete plank and steel frame structure completely unlike the decking and support

delineated by applicant. Accordingly, it is submitted that neither Fisher et al. nor

Naccarato et al. is properly considered art analogous to claim 30, rendering their use in

the present obviousness rejection of claim 30 improper.

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4. Conclusion.

In view of the foregoing remarks, it is submitted that present claim 30

patentably defines over Fisher et al. in view of Naccarato et al. Accordingly, reversal

of the rejection of claim 30 under 35 USC §103(a) over Fisher et al. in view of

Naccarato et al. is respectfully requested.

E. The decking system of claim 33 meets the conditions for patentability.

The Examiner has rejected claim 33 under 35 U.S.C. §103(a) as being

unpatentable over US Patent 556,998 to Major in view of US Patent 5,704,181 to Fisher et

al. on the following basis:

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Major,

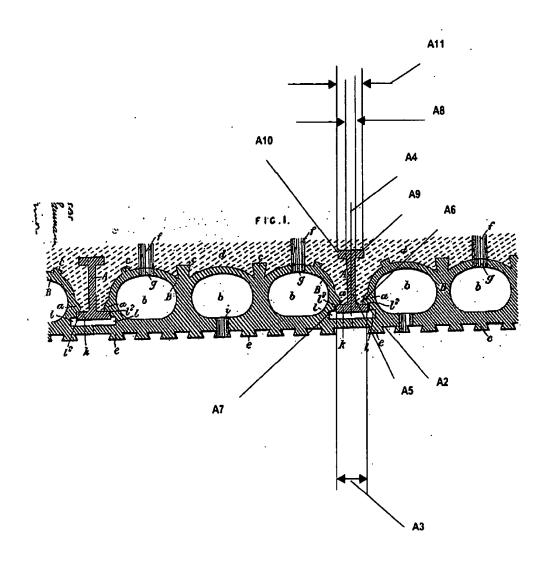
556,998 (see marked-up attachment), in view of Fisher et al., 5,704,181.

For the convenience of the Board, a copy of Figure 1 of Major, including

the aforementioned markings added by the Examiner, is reproduced below.

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(Major, US Patent 556,998, as annotated by the Examiner)

Major is directed to a fireproof and ventilating floor construction. Referring to Fig. 1 above, items A are said to be "ordinary metal girders of I-section, supported at their ends on piers or on the walls of the building." Page 1, col. 1, lines 22-25. Items B are lintels molded in clay, concrete, or other fire-resisting material. Lines 25-28. The lintels are of a length to reach from center to center of the lower flanges of two adjacent girders A. Formed in the upper surfaces of the lintels are

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undercut projections c, which are said to serve to key the lintel to concrete d, which fills the space between the girders and covers the whole of the upper sides of the linters and girders A to form the finished floor surface.

The Examiner makes the following assertion in rejecting claim 33:

Regarding claim 33, Major, discloses, in Figure 1, a decking system comprising boards B and an anchoring device A. Each of the boards B has a top e, a bottom c, two sides I2 and two ends (Fig. 2A). At least one groove I is located along one of the sides I2. The anchoring device A consists essentially of a substantially flat horizontal top element k, at least one substantially vertical support member A5, and a substantially flat horizontal bottom element A9. The top element k has a top view configuration including two sides A2 and a predetermined first width A3 as measured side to side. The first width A3 is measured at a maximum width between the sides A2. The top element k has an imaginary center line A4. The support member A5 is attached to an underside A6 of the top element k along the center line A4 and the support member A5 extends downwardly therefrom. The support member A5 has two sides A7 and a predetermined second width A8 as measured side to side at a maximum width. The bottom element A9 has a flat bottom view configuration, which includes sides A10, and a predetermined third width A11 as measured side to side at a maximum width at a base. The first width A3 is greater than the second width A8 and the third width A11. The third width A11 is greater than the second width A8.

However, Major fails to disclose, the bottom element A9 having a generally trapezoidal shape, and making the anchoring device A of molded plastic material.

Fisher et al. teach, in Figure 3, a bottom element 14a of an anchoring device consisting essentially of a trapezoidal shape to have a dissymmetric anchoring device so that it increase load-bearing capacity (col. 4, lines 17-36). Therefore, as taught by Fisher et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to configure the bottom element having a generally trapezoidal shape so that the anchoring device has a dissymmetric shape to increase load-bearing capacity. Note, the base will be a trapezoidal base due to the horizontal bottom element having a trapezoidal shape.

In regards to the material, applicant is reminded that, within the general skill of a worker in the art, selecting a known material on the basis of its suitability for the intended use is a matter of obvious design choice. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the device of plastic. *In re Leshin*, 125 USPO 416. Furthermore, it is well known that plastic material is capable of having a metal fastener driven through.

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1. Independent claim 33 meets the conditions for patentability because

Major and Fisher et al., whether taken singly or in combination, do not

disclose or suggest every feature of the decking system of claim 33.

Contrary to the contention of the Examiner, appellant maintains that

Major and Fisher et al. fail to disclose or suggest all the features delineated by claim

33. Appellant specifically traverses certain identifications made in the foregoing

statement of rejection as being based on an untenable re-definition of the terms "top"

and "bottom" recited in the instant specification and claims. It is submitted that no

special technical meaning has been given to these terms in the specification and no

indication has been given in the specification that the terms are used in other than their

ordinary directional sense.

The foregoing statement rejecting claim 33 associates "top" with elements

"e" and "k" and "bottom" with elements "c" and "A9," even though element "c" is

depicted as being above element "e" and element "A9" is above element "k" in Fig. 1.

Furthermore, the floor surface of the system of Fig. 1 is provided by concrete "d." On

the other hand, the Examiner's reading of Major requires an inversion of the ordinary

meanings of "top" and "bottom," so that "bottom" is closer to the floor surface than

"top," both for "boards" B (which allegedly have "top" e and "bottom" c) and

"anchoring device" A (which allegedly has "top" k and "bottom" A9). This

understanding is submitted to be repugnant to ordinary use of language. Appellant

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submits that in the absence of any evidence to substantiate this inversion, the Examiner's reading is wholly untenable.

Appellant respectfully points to still other distinctions between the structure depicted by Fig. 1 above and the decking system of claim 33. The Examiner's contention that the clay, concrete, or fire resistant material elements called lintels B by Major are the decking boards of claim 33, feature (I.) is traversed. Clearly, lintels B do not provide any exposed surface. Instead, they are covered with concrete "d" and so would not be regarded as being "decking boards" by a skilled artisan. Beams "A" are said to be "ordinary metal girders of I-section supported at their ends on piers of on the walls of the building" (page 1, col. 1, lines 22-25), whereas the anchoring devices of claim 33 include a bottom element that is positioned upon a support board. The Examiner has failed to identify any such support board in the structure of Major, let alone a support board on which lintels/"decking boards" B rest, as required by claim 33. Instead, lintels B are supported by the extended-length girder A.

For the reasons set forth above, a skilled artisan would not recognize the extended-length girder A, which necessarily must reach between its points of support at piers or walls of the building, as being an anchoring device. Such a length would defeat the purpose of installing decking boards with intervening gaps to permit water drainage. Major clearly does not contemplate any need for water drainage, since the floor structure is used for ventilation. The only penetrations through the surface are into the hollows of the lintels, through which air is appointed to flow. No other drainage is

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provided. In addition, the Major girder clearly could not be made of plastic, as the Examiner contended, and still have sufficient strength to support lintels B.

2. Claim 33 meets the conditions for patentability because motivation to combine and modify the Major and Fisher et al. disclosures has not been established.

The Examiner has contended that it would be obvious to configure the bottom element to have a generally trapezoidal shape "so that the anchoring device has a dissymmetric shape to increase load-bearing capacity." However, no evidence is adduced to substantiate the claim that a trapezoidal base or a dissymmetric shape would, in fact, produce such an increased load-bearing capacity. The Examiner has identified the "bottom" of the purported anchoring device in Major's Fig. 1 as being that portion closest to the surface of concrete floor d. It is not apparent to appellant why a dissymmetric or trapezoid-containing form would be preferred in this configuration, or even why these features would provide the purportedly obvious increase in strength. Rather, appellant submits that the contention is based purely on hindsight reconstruction in which the instant specification has been used improperly as a teacher against itself. ["To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." W.L. Gore &

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Assocs., Inc. v. Garlock, Inc., 220 USPQ 303, 312-13 (Fed. Cir. 1983), cert. denied,

469 U.S. 851 (1984), emphasis added.]

In addition, even if the Major I-beam were to be modified in accordance

with the Fisher et al. disclosure, any trapezoidal portion of the beam would be located

at the part of the beam closest to the floor surface, not at the bottom of the anchoring

device, as delineated by claim 33. Such would not be the same arrangement of the

elements as set forth in claim 33, as required under Lindemann Maschinenfabrik GmbH

v. American Hoist & Derrick Co., supra.

Applicant also traverses the contention that it would have been obvious to

substitute any plastic structure for the steel I-beam girders taught by Major and Fisher

et al., based on In re Leshin. Clearly, a plastic beam is not a feasible replacement for a

steel I-beam in the structures of Fisher et al. or Major. No plastic structure would

support the concrete floor or other components that would be included in any building

construction disclosed or suggested by Major and Fisher et al. whether taken singly or

in combination.

3. Claim 33 meets the conditions for patentability because neither

Major nor Fisher et al. is analogous art.

In Section VII.C.3. above, Appellant has set forth reasons why Fisher et

al. is not analogous art for Claim 33. Appellant respectfully submits that Major is also

not analogous art, it being directed to a construction form employing steel supports, a

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concrete finished floor surface, and structural lintel members of clay, concrete or other

fire-resistant material, which are all very different in their properties, weight, and

strength than the decking boards and anchoring device used in the decking system of

claim 33. Accordingly, it is submitted that a person having ordinary skill in the art

would have no motivation to look to Major and Fisher et al., whether singly or in

combination, for decking structures and construction techniques, rendering the

references non-analogous.

4. Conclusion.

In view of the foregoing remarks, it is submitted that present claim 33

patentably defines over Major in view of Fisher et al. Accordingly, reversal of the

rejection of claim 33 under 35 USC §103(a) over Major in view of Fisher et al. is

respectfully requested.

F. The decking system of claim 34 meets the conditions for patentability.

The Examiner has rejected claim 34 under 35 U.S.C. §103(a) as being

unpatentable over US Patent 556,998 to Major in view of US Patent 5,704,181 to Fisher

et al. and further in view of US Patent 6,442,908 to Naccarato et al. on the following

basis:

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Major, 556,998, in view of Fisher et al., 5,704,181, as applied to claim 33 above, and

further in view of Naccarato, 6,442,908.

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Regarding claim 34, Major, as modified above, fails [to] disclose the vertical support member having recesses with support columns located therebetween. Naccarato et al. teach, in Figs. 4 and 5, a vertical support member 14c having recesses 15 to promote optimal flow of grout material through the support member (col. 5, lines 29-35). Therefore, as taught by Naccarato et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to include recesses in the vertical support member to promote optimal flow of grout material through the support member. Applicant is reminded that columns will be inherently located between the recesses as shown in Figure 3 of Naccarato et al.

1. Claim 34 meets the conditions for patentability because Major, Fisher et al., and Naccarato et al., whether taken singly or in combination, do not disclose or suggest every feature of the decking system of claim 34.

Appellant submits that the reasons set forth hereinabove in Section VII.E.2. to establish that claim 33 is patentable over the combination of Major and Fisher et al. apply with equal force to the rejection of claim 34, which depends from base claim 33. A comparison is respectfully drawn between the limitation recited in claim 34, which recites a preferred form of the anchoring device used in the decking system of base claim 33, and the similarly-worded limitation recited in claim 30 drawn to a preferred form of the anchoring device of base claim 29. As set forth in Section VII.D.1., Naccarato et al. is directed to a construction substantially similar to that of Fisher et al., and does not cure the lack of disclosure of the claimed anchoring device delineated by claims 29 and 30. The Examiner's reasoning for asserting that Naccarato et al. in combination with Major and Fisher et al. defeats claim 34 is similar to his argument for using Naccarato et al. and Fisher et al. in rejecting claim 30. To the

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contrary, Appellants maintain the argument fails with respect to claim 34, for the same

reasons set forth above to demonstrate it fails with respect to claim 30.

2. Claim 34 meets the conditions for patentability because motivation

to combine and modify the Major, Fisher et al., and Naccarato et al.

disclosures has not been established.

Appellant respectfully submits that the same reasons that establish that

there is no motivation to combine Fisher et al. and Naccarato et al. to reach the subject

matter of claim 30 apply with equal force to the addition of Naccarato et al. to the

combination of Major and Fisher et al. with respect to the preferred decking system of

claim 34 and base claim 33 from which claim 34 depends.

3. Claim 34 meets the conditions for patentability because neither

Major, Fisher et al., nor Naccarato et al., is analogous art.

Appellant respectfully submits that the same reasons set forth in Sections

VII.C.3., VII.D.3., and VII.E.3. to establish that Major, Fisher et al. and Naccarato et

al. are not directed to analogous art apply with equal force to the combination of these

references as applied to claim 34.

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4. Conclusion.

In view of the foregoing remarks, it is submitted that present claim 34 patentably defines over the combination of Major, Fisher et al., and Naccarato et al. Accordingly, reversal of the rejection of claim 34 under 35 USC §103(a) over Major in view of Fisher et al. and further in view of Naccarato et al. is respectfully requested.

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(VIII) Conclusion

In light of the foregoing remarks, it is respectfully submitted that the

anchoring device of claim 29 (and claims 30-32 dependent thereon); and the decking

system of claim 33 (and claims 34-38 dependent thereon) are not disclosed or suggested

by any combination of the art references applied, and thus meet the conditions for

patentability required by 35 U.S.C. §§ 102 and 103(a).

Accordingly, reversal of the rejection of claims 29, 31, 32 under 35 USC

§102(b); claims 33 and 35-38 under 35 USC §102(e); and claims 29, 30, 33, and 34

under 35 USC §103(a), and allowance of the present application, are earnestly solicited.

Respectfully submitted,

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(IX) Claims Appendix — Claims On Appeal

1-10. (cancelled).

11-21. (withdrawn).

22-28. (cancelled).

29. An anchoring device for joining three boards, which consists essentially of:

(a) a substantially flat horizontal top element having a top view

configuration which includes two sides and has a first predetermined

width as measured side to side, said first predetermined width being

measured at a maximum width between said two sides, said top element

having an imaginary center line;

(b) at least one substantially vertical support member attached to an

underside of said top element along said imaginary center line of said

top element and extending downwardly therefrom for a predetermined

length, said substantially vertical support member having two sides and

a second predetermined width as measured side to side at a maximum

width; and,

c) a substantially flat horizontal bottom element having a flat bottom view

configuration which includes two sides and having a generally

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trapezoidal shape, and having a third predetermined width as measured

side to side at a maximum width at a trapezoidal base;

wherein said first predetermined width is greater than both said second

predetermined width and third predetermined width, and wherein

said third predetermined width is greater than said second

predetermined width, and said anchoring device is adapted to

maintain said top element in a predetermined position during use for

joinder of two adjacent boards which have been pre-cut with

receiving slots, and to position said bottom element upon a support

board which said two adjacent boards rest for attachment of said

anchoring device to said support board for anchoring and support of

said two adjacent boards; and,

further wherein said device is made of molded plastic material capable

of having a metal fastener driven therethrough.

30. The anchoring device of claim 29 wherein said vertical support member has a

plurality of recesses with support columns located therebetween.

31. The anchoring device of claim 29 wherein said top element two sides are

symmetric relative to one another.

32. The anchoring device of claim 29 wherein said top element two sides are

parallel to one another.

33. A decking system which comprises:

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I. a plurality of decking boards, each decking board having a top, a bottom,

two sides, and two ends, and at least one groove located along one of said

sides, said groove adapted to receive an anchoring device; and

II. an anchoring device which consists essentially of:

(a) a substantially flat horizontal top element having a top view

configuration which includes two sides and has a first predetermined

width as measured side to side, said first predetermined width being

measured a maximum width between said sides, said top element having

an imaginary center line;

(b) at least one substantially vertical support member attached to an

underside of said top element along said imaginary center line of said top

element and extending downwardly therefrom for a predetermined length,

said substantially vertical support member having two sides and a second

predetermined width as measured side to side at its maximum width; and

(c) a substantially flat horizontal bottom element having a flat bottom

view configuration which includes two sides and having a generally

trapezoidal shape, and having a third predetermined width as measured

side to side at its maximum width at a trapezoidal base;

wherein said first predetermined width is greater than both said second

predetermined width and third predetermined width, and wherein said

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third predetermined width is greater than said second predetermined

width, and said anchoring device is adapted to maintain said top

element in a predetermined position during use for joinder of two

adjacent boards which have been pre-cut with receiving slots, and to

position said bottom element upon a support board which said two

adjacent boards rest for attachment of said anchoring device to said

support board for anchoring and support of said two adjacent boards;

and,

further wherein said anchoring device is made of molded plastic material

capable of having a metal fastener driven therethrough.

34. The decking system of claim 33 wherein said vertical support member of said

anchoring device has a plurality of recesses with support columns located therebetween.

35. The decking system of claim 33 wherein said top element two sides are

symmetric relative to one another.

36. The decking system of claim 33 wherein said groove establishes an upper half

of each said board above said groove and a lower half of each said board below said

groove, wherein said upper half has a greater width than said lower half.

37. The decking system of claim 33 wherein said plurality of decking boards are

made of materials selected from the group consisting of synthetic polymers, at least

partially foamed synthetic polymers, wood, wood composite, and combinations thereof.

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38. The decking system of claim 33 wherein said top element two sides are parallel to one another.

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(X) Evidence Appendix

Not applicable.

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(XI) **Related Proceedings Appendix**

Not applicable.

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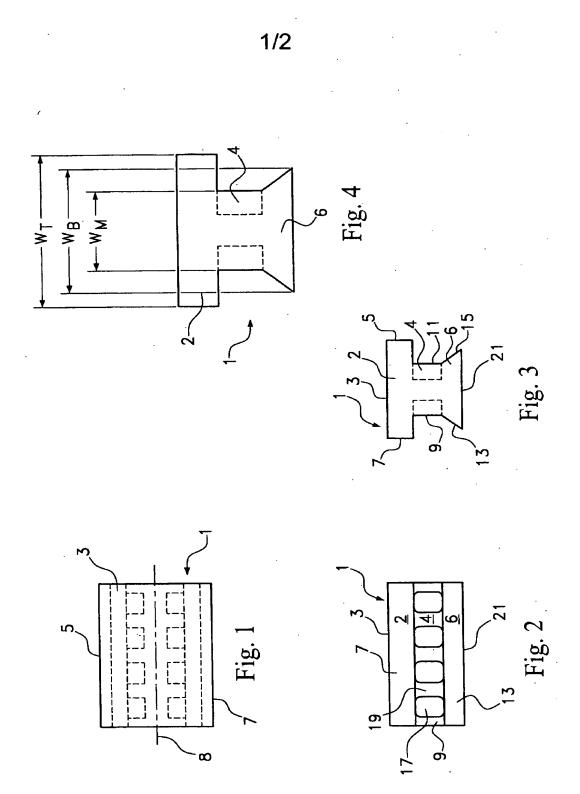
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(XII) Drawings

For the convenience of the Board, a copy of the drawings submitted with Applicant's Amendment under 37 CFR 1.116 on May 24, 2005, but not entered, are set forth below.



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